

REMARKS

In the office communication dated August 10, 2007 as entered in the above-captioned matter, the Examiner objected to claims 12 and 13 as containing an informality and rejected claims 1, 3-5, 8-13, 17-25, and 30 under 35 U.S.C. 103(a) given Hack et al. (U.S. Publication No. 2003/0109286) ("Hack") in view of Lundgren et al. (U.S. Patent No. 5,870,485) ("Lundgren"). Claims 6, 12, and 13 were rejected under 35 U.S.C. 103(a) given Hack in view of Lundgren and further in view of Ikeda (U.S. Publication No. 2003/0222334) ("Ikeda"). Claims 14-16 and 26-29 were rejected under 35 U.S.C. 103(a) given Hack in view of Lundgren and further in view of an article entitled *Electroactive Polymer Artificial Muscles Acoustic Applications* by SRI International ("SRI"). Claim 25 was rejected under 35 U.S.C. 103(a) given Hack in view of Sperle et al. (U.S. Publication No. 2003/0076971) ("Sperle"). Claims 26-29 were rejected under 35 U.S.C. 103(a) given Hack in view of Sperle and SRI. The applicant respectfully traverses these rejections and requests reconsideration.

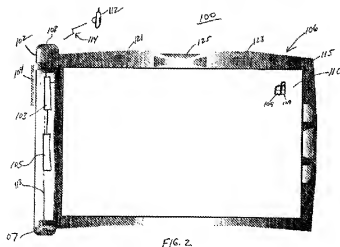
Objections to the claims

The Examiner has made note of an improper claim dependency with respect to claims 12 and 13 in that they depend from cancelled claim 6. Pursuant to this amendment the applicant has corrected this dependency such that claims 12 and 13 now depend from claim 1. The applicant thanks the Examiner for noting this informality and for affording the opportunity to make this correction. The applicant submits that the claims are now all in suitable condition to support continued examination and allowance.

Rejections under 35 U.S.C. 103(a)

Claims 1, 3-5, 8-13, 17-25, and 30 were rejected under 35 U.S.C. 103(a) given Hack in view of Lundgren. The Examiner essentially suggests that Hack's flexible display system can be obviously modified to include Lundgren's acoustic dampener to thereby meet the limitations of the independent claims.

The Hack reference discloses a flexible multimedia system that features a flexible display system (106) having both a display (110) and a display border (115) that completely surrounds the display (110) itself while also housing a speaker (123) and a digital imager (125) that produces “digital data corresponding to still photos or video”¹ (all as shown in FIG. 2 of Hack as reproduced below for the convenience of the reader). This display border (115) (which contains the speaker (123) and the digital imager (125)), though considered a part of the display system (106), is nevertheless separate from the display screen (110) itself.²

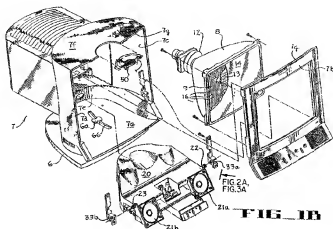


As acknowledged by the Examiner, Hack lacks any teachings whatsoever with respect to acoustically dampening the speaker from the display.

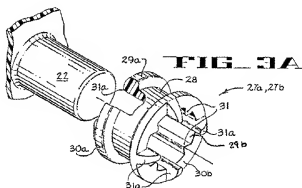
Lundgren discloses a computer display monitor having integral stereo speakers. Lundgren's FIG. 1B, shown below, generally illustrates pair of speakers (21a) and (21b) as well as a display CRT (8) having an aperture grill (9) that Lundgren wishes to protect from vibrations from the speakers.

¹ Hack at paragraph 0065.

² Hack at paragraph 0065.



Lundgren provides this acoustic separation by providing only “an absolute minimum number of attachment points to minimize structurally transmitted vibration from the speaker enclosure 20 to aperture grill 9 within CRT 8.”³ Lundgren then further employs grommets (27a and 27b) as shown in his FIG. 3A (as shown below) that fit on the cylindrical bosses (22 and 23) that comprise these few “attachment points.”



The Examiner suggests that one can make an obvious combination of Lundgren’s acoustic dampening material and place them between Hack’s speaker and display to achieve the limitations of, for example, claim 1. The applicant respectfully disagrees.

When making a combination of references pursuant to 35 U.S.C. 103(a), one may not simply pick and choose from amongst the disaggregated elements of the references themselves. Instead, it is understood that one skilled in the art will take the references as a whole and not as a

³ Lundgren at column 6, lines 1-3.

grab-bag of individual building blocks that lack any context. Here, the Examiner's suggestion that the notion of using a dampening material that does not completely surround a speaker as taught in Lundgren can be obviously combined with the teachings of Hack to yield the recitations of the claims ignores the teachings and context of both references.

Consider, for example, that Hack seeks to provide a flexible user interface that will readily and easily roll up and store within a small housing. Such design requirements impose any number of corresponding challenges and needs. With that in mind, Lundgren's teachings are not merely the use of acoustic dampening material, but rather the use of acoustic dampening material in conjunction with "an absolute minimum number of attachment points" between a speaker assembly and a corresponding display. In this sense, Hack and Lundgren could hardly be more diametrically opposed, as Lundgren seeks a minimum number of attachment points while Hack proceeds instead to attach his display on all sides and at all possible points of attachment to a frame that, in turn, holds and is sonically coupled to his speaker.

The applicant respectfully observes that seeking to impose Lundgren's use of an absolute minimum number of attachment points in conjunction with acoustic dampening material at those few points of attachment in combination with Hack's teachings suggests significant and non-trivial design challenges. As but one example in this regard, how well will Hack's apparatus roll up and retract within its housing upon severing most of the points of connection between Hack's display and the display frame? The thin and flexible material employed for both of these components strongly suggests serious problems will be experienced upon attempting such a radical change to Hack's design.

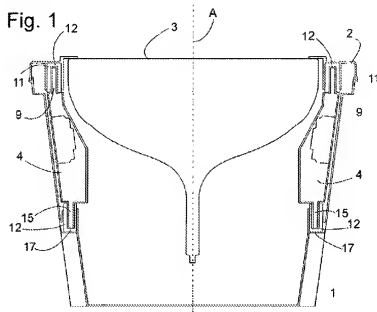
Therefore, as Lundgren's teachings, in context, are to employ an acoustic dampening material in conjunction with an absolute minimum number of attachment points, and as the problems presented by considering such a dramatic alteration of Hack's structure are so numerous and so clearly evident, the applicant respectfully submits that a skilled artisan would be highly *unmotivated* to long consider such a path of inquiry. This being so, the applicant respectfully submits that claim 1's requirements for "an acoustic dampener operably coupled between the first flexible substrate portion and the second flexible substrate portion and only partially disposed about the flexible audio transducer to substantially fully separate the first

portion from the second portion” cannot properly be viewed as a mere obvious combination of Hack with Lundgren.

The remaining independent claims, 20 and 25, have this same limitation and hence are similarly distinguished from the references of record.

Claim 25

Independent claim 25 was also rejected under 35 U.S.C. 103(a) given Hack in view of Sperle. Sperle discloses a casing for a television set or the like. As shown in Sperle's FIG. 1 (reproduced below), Sperle's apparatus includes a first casing member (2) that holds a cathode ray tube (3) and side loudspeaker units (4) that connect to the first casing member (2).



The loudspeaker units (4) connect to the first casing member (2) using male members (9) and corresponding female members (11). Sperle also teaches that the space between these male and female members can be filled with a “vibration dampening material 12”⁴ to thereby avoid any direct contact between the first casing member (2) and the loudspeaker units (4). As this dampening material (12) cannot be viewed as being fully disposed about the speakers, the

⁴ Sperle at paragraph 0028.

Examiner suggests that this teaching from Sperle might be obviously combined with Hack to thereby meet the recitations of the applicant's claims.

A suggestion that the notion of using a dampening material that does not completely surround a speaker as taught in Sperle can be obviously combined with the teachings of Hack to yield the recitations of the claims again ignores the teachings and context of both references.

In particular, Hack discloses a speaker that is set in a frame that is separate from, though fully surrounding, a display. To state the obvious, then, Hack's display makes physical contact with the frame that holds the speaker at every point along the periphery of that display. To employ Sperle's teachings in Hack would therefore require placing a dampening material *around the entire periphery of the display itself*; unless this is done, Sperle's teachings regarding avoiding *any* direct contact between the display and the speaker housing will remain unmet.

Doing this, however, represents a significant design and manufacturing issue. At a minimum, one might expect the cost of such an embodiment to be considerable and hence a significant point of discouragement to a person skilled in the art who no doubt is hoping to accommodate an overall need for providing a cost-effective platform. Furthermore, such an embodiment will render it difficult, if not impossible, to properly connect Hack's display to his digital imager as the latter also resides on the same frame as the speaker. The digital imager, however, is that which provides the content that is to be rendered on that display; breaching this connection would therefore render the overall apparatus unable to accomplish its intended primary function of displaying content of interest.

With all due respect, the applicant posits that no suggestion exists in these references to pick and choose from amongst their constituent elements to support selecting some teachings to employ and other associated teachings to ignore. Here, in fact, taking these references in context, the applicant respectfully observes that one skilled in the art would be highly disinclined to make the combination being suggested by the Examiner. The only way one can reasonably pick and choose amongst these various teachings to make the suggested combination is to ignore the context and complete teachings of both references and to use instead the applicant's own present teachings as a guide to inform that combination. Such hindsight-based thinking, however, is of course prohibited when conducting an analysis under 35 U.S.C. 103(a).

The applicant respectfully submits that claim 25 does not represent an obvious combination of Hack with Sperle and hence is allowable over these references, as claim 25 includes the recitation, "acoustic dampening means operably and integrally coupled between the flexible display means and the flexible speaker means and only partially disposed about the flexible speaker means to substantially fully separate the flexible speaker means from the flexible display means." Accordingly, such a claim cannot be viewed as being an obvious combination of Hack with Sperle.

The dependent claims

The remaining claims are ultimately dependent upon one of these dependent claims. While the applicant believes that other arguments are available to highlight the allowable subject matter presented in various of the dependent claims, the applicant also believes that the comments set forth herein regarding allowability of the independent claims are sufficiently compelling to warrant present exclusion of such additional points for the sake of brevity and expedited consideration.

Conclusion

There being no other objections to or rejections of the claims, the applicant respectfully submits that claims 1, 3-5, and 8-30 may be passed to allowance.

Respectfully submitted,

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